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Amendments to Claims

The following is a listing of the claims presently in the application, wherein claims 1-11 are canceled, claims 14 and 22 are amended, and claims 23-24 are withdrawn:

Claims 1-11: cancelled

12. (original) A flex-based fuel cell, comprising :
a first flexible circuit; comprising:
a first flexible substrate, and
a porous metal/catalyst layer, wherein the porous metal/catalyst layer comprises a plurality of pores oriented to distribute fuel to substantially all of the first flexible circuit using a capillary action;
a separation section adjacent the first flexible circuit; and
a second flexible circuit adjacent the separation circuit, wherein the first and the second flexible circuits are conformable to a substantially non-planar shape.
13. (original) The flex-based fuel cell of claim 12, wherein the separation section is a proton exchange membrane.
14. (currently amended) The flex-based fuel cell of claim 12, wherein the separation section is a channel comprising ~~dienized~~ deionized water.
15. (original) The flex-based fuel cell of claim 12, wherein the substantially non-planar shape comprises a cylinder.
16. (original) The flex-based fuel cell of claim 15, wherein an interior of the cylindrical flex-based fuel cell comprises liquid fuel.
17. (original) The flex-based fuel cell of claim 16, wherein the liquid fuel is methanol.
18. (original) The flex-based fuel cell of claim 12, further comprising a dry film adhesive disposed between the first flexible substrate and the second flexible substrate.
19. (original) A flex-based fuel cell, comprising:
means for converting liquid fuel to protons, comprising:
means for transporting liquid fuel through the liquid fuel

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means, and

first means for flexibly supporting the liquid fuel converting means;

means for receiving the protons, comprising:

means for converting the protons to water vapor, and

second means for flexibly supporting the proton converting means; and

means for exchanging the protons from the liquid fuel converting means to the proton converting means.

20. (original) The flex-based fuel cell of claim 19, wherein the liquid fuel transporting means comprises a porous metal layer having means for causing capillary transport of the liquid fuel within the porous metal layer.
21. (original) The flex-based fuel cell of claim 19, wherein the proton exchanging means comprises a proton exchange membrane.
22. (currently amended) The flex-based fuel cell of claim 19, wherein the proton exchanging means comprises a ~~dionized~~ deionized water channel.
23. (withdrawn) A method of preparing a flex circuit for a fuel cell, comprising:
 - patterning a conductive materials on flex supporting means having a front surface and a back surface, wherein the conductive materials is patterned on the front surface;
 - attaching a layer of porous material to the conductive materials;
 - depositing a layer of catalytic coating on the surface of the porous material; and
 - ablating the supporting means from the back surface to make openings so that the porous materials is exposed.
24. (withdrawn) The method of claim 23, further comprising the step of coating the catalyst layer with a thin layer of proton transfer membrane.